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Before the
Federal Communications Commission
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)

Amendment of the Commission's)
Rules to Establish New Personal)
Communications Services)

GEN Docket No. 90-314

RM-7140, RM-7175, RM-7618

To: The Commission

REPLY OF COMSAT CORPORATION

Pursuant to Section 1.429 of the Commission's Rules, COMSAT Corporation ("COMSAT"), through its COMSAT Mobile Communications division, hereby submits its Reply to the Oppositions of Bell Atlantic Personal Communications, Inc. ("Bell Atlantic"), MCI Telecommunications Corporation ("MCI") and Sprint Corporation ("Sprint") and the Comments of the Utilities Telecommunications Council ("UTC") (the "Oppositions").

On December 8, 1993, COMSAT filed a Petition for Partial Reconsideration ("Petition") of the Commission's Second Report and Order in the instant proceeding.¹ COMSAT requested that the Commission reconsider its decision to allocate the 2180-2200 MHz band to terrestrial Personal Communications Services ("PCS") as this band has been previously allocated at the 1992 World Administrative Conference ("WARC-92") to global Mobile Satellite Services ("MSS"). The Oppositions fail to raise any significant issues challenging COMSAT's Petition. The Commission should, therefore, grant COMSAT's Petition.

¹Second Report and Order, GEN Docket No. 90-314, 8 FCC Rcd 7700 (1993) ("PCS Order").

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I. The Current MSS Allocations and Proposed Spectrum Reserve for Satellite-Based PCS Are Not Sufficient to Sustain the Development of Future Global MSS Services

COMSAT strongly disagrees with the claim advanced in several of the Oppositions that there is currently sufficient spectrum available to meet the demands of existing and future global consumers of MSS services.² The utility of specific bands is limited by technical and regulatory constraints imposed on the usage of the spectrum. It is inaccurate and misleading to simply combine all national, regional and global allocations and claim that there is more than enough spectrum currently available to meet the diverse and rapidly growing markets for mobile satellite services. Indeed, the only WARC-92 global MSS bands that would be useful to Inmarsat and other satellite operators planning new global systems are the bands 1980-2010 MHz and 2170-2200 MHz.

While other bands were allocated to MSS at WARC-92, they are regional allocations (i.e 1970-1980 MHz and 2160-2170 MHz for MSS operations in Region 2), and are not available to support a global system. Also, while the bands 1610-1626.5 MHz and 2483.5-2500 MHz are allocated to MSS on a global basis, there are a number of Low Earth Orbit ("LEO") satellite systems proposed by U.S. companies to operate in these bands. Studies have shown that sharing constraints will limit the number of systems capable of operating in these bands. Furthermore, the Commission has not yet determined how the number of systems proposing to operate in

²Bell Atlantic Opposition at 8; Sprint Opposition at 6; UTC Comments at 6-7.

the so-called "LEO bands" will share spectrum -- especially in view of the bi-directional transmissions Motorola's IRIDIUM system proposes to use, and the fact that the Russian GLONASS aeronautical navigational satellite system will operate in the lower portion of the 1610-1626.5 MHz band.

The Commission's Staff is well aware of the true results of WARC-92. The only new spectrum allocated at WARC-92 that may become available soon enough to accommodate new global MSS systems like the planned Inmarsat-P system are the global MSS bands at 1980-2010 MHz and 2170-2200 MHz. The only other frequencies available are the existing L-band allocations. COMSAT and Inmarsat are under considerable pressure from the Commission to coordinate more use of the L-band with new competitors. Without the additional WARC-92 allocations at 2 GHz there simply is not enough spectrum to meet worldwide demand. This fact was documented by the world community during the four years of work leading to WARC-92.

Nevertheless, the Commission's PCS Order abrogates two-thirds of the primary global MSS allocation adopted at WARC-92. In allocating the 2180-2200 MHz (MSS downlink) band to terrestrial PCS, the Commission renders useless the corresponding MSS uplink at 1990-2010 MHz and, thus, eliminates 40 MHz of the 60 MHz global MSS allocation made at WARC-92. Consequently, the Commission's 40 MHz "reserve" of spectrum at 2 GHz for satellite-based PCS consists of two, small 10 MHz band pairs -- only one of

which is allocated for global MSS services.³ Thus, contrary to the Oppositions, the terrestrial PCS allocation actually eliminates more spectrum for MSS than it reserves.⁴

Without the United States' adoption of the new 2 GHz allocation of global MSS spectrum, COMSAT and other Inmarsat owners will be preempted from incorporating the 2 GHz MSS bands in the next generation of Inmarsat satellites which are under intense evaluation, with the final decision necessary in 1995. There are no substitute bands available. As a result, Inmarsat and other MSS operators will be denied the opportunity to bring U.S. and worldwide customers the full potential of a global, interconnected PCS/MSS handheld communications system. A global MSS/PCS system, operating at 2 GHz, would provide global roaming capability. Future users of systems now in the planning stage, such as Inmarsat-P, would be able to place a call from their handsets anywhere in the world, including low density and remote areas, at affordable costs. The PCS Order, if upheld, would delay the rapid deployment of these advanced global MSS services and would undermine the efforts of the United States and the MSS industry to negotiate suitable allocations for new MSS bands.

II. COMSAT's Petition Does Not Seek to Reduce the Terrestrial PCS Allocation, But to Ensure the Integrity of the International Allocation Process at WARC-92

Contrary to the characterization of COMSAT's Petition in the Oppositions, COMSAT does not seek a reduction in the overall

³PCS Order at 7783.

⁴See MCI Opposition at 6; Bell Atlantic Opposition at 8.

allocation of 120 MHz for licensed terrestrial PCS systems.⁵ COMSAT simply opposes the allocation to terrestrial PCS of the 2180-2200 MHz band, which was allocated for global MSS services at WARC-92. In reconsidering its decision, the Commission is free to look for substitute spectrum to replace this 20 MHz portion of the terrestrial PCS allocation. Indeed, at least one party has suggested an alternative allocation scheme at 2 GHz that maintains the total allocation for PCS, but also preserves the regional and global MSS allocations.⁶

The allocation of the 2180-2200 MHz band to terrestrial PCS nullifies years of efforts by the U.S. government and the MSS industry to secure agreement through the ITU's international allocations process on new allocations for global MSS services. The effort began in 1989, with the initiation of a proceeding at the Commission to prepare for WARC-92. Based upon a full record demonstrating immediate and future needs for MSS, the U.S. delegation took the lead at WARC-92 and was successful in negotiating new allocations for global MSS in the 1800-2010/2170-2200 MHz bands. The need for global MSS allocations was reaffirmed at the recently concluded 1993 World Radio Conference ("WRC-93"). The conferees agreed to consider moving up the worldwide implementation date for these bands at the 1995 World Administrative Radio Conference ("WRC-95"), and encouraged

⁵Sprint Opposition at 5-6; MCI Opposition at 6; Bell Atlantic Opposition at 8.

⁶See TRW Inc. Petition for Partial Reconsideration, Gen. Docket No. 90-314, filed December 8, 1993 ("TRW Petition").

Administrations to cooperate immediately in coordination consultations for the use of these bands.

Should the Commission's PCS Order stand, the years of work by the U.S. Government, the U.S. MSS industry and the majority of the 182 member countries of the ITU will be wasted and the world will be forced to begin new negotiations within the ITU framework to find suitable spectrum for global MSS. Essentially, the entire allocation process would have to be reconsidered at the next conference in 1995, or, given the relatively short lead time, possibly not until 1997. This would be too late to incorporate new bands into the planned future satellite systems.⁷

III. The Commission Failed to Give Sufficient Notice of Its Allocation of the 2180-2200 MHz Band to Terrestrial PCS

COMSAT also strongly disagrees with the assertion made by Bell Atlantic that the Commission provided adequate notice of the possible overlap between the domestic PCS allocation and the global MSS allocations at 2 GHz.⁸ In comparing the proposed rule to the final PCS allocation, there is much to support COMSAT's argument that it could not have anticipated the allocation scheme imposed by the final rule.

As COMSAT indicated in its Petition, the initial PCS Notice of Proposed Rule Making ("NPRM") sought comments on a specific

⁷For these reasons, the suggestion that MSS operators seek "additional" bands for MSS outside the PCS allocation is not feasible as there is no time to incorporate additional bands in the global systems now being planned. See Bell Atlantic Opposition at 10; MCI Opposition at 6.

⁸Bell Atlantic Opposition at 9, n. 21.

proposal to allocate 90 MHz for terrestrial PCS in the 1850-1895/1930-1975 MHz bands.⁹ The proposed spectrum allocation did not affect the global MSS allocation at 1980-2010/2170-2200 MHz, but implicated only a 5 MHz portion of the Region 2 MSS allocation. While the NPRM suggested that the terrestrial PCS allocation ultimately could be increased, the Commission referred only generally to its desire to accommodate the final PCS allocation "in or near" the 400 MHz of spectrum between 1800-2200 MHz.¹⁰ Such a broad statement is too general to provide adequate notice to interested parties.¹¹ This is particularly so, as COMSAT had every reason to believe that the Commission would avoid allocating to terrestrial PCS the very MSS global bands that the U.S. delegation had successfully negotiated at WARC-92.

Elsewhere in the PCS NPRM, the Commission affirmatively stated its intention that the terrestrial PCS allocation not preclude satellite-based PCS and requested comment on how domestic and international satellite-based offerings could be integrated into the proposed rules.¹² From such statements it was logical for COMSAT to conclude, as indicated in its comments

⁹Notice of Proposed Rule Making and Tentative Decision, GEN Docket No. 90-3314, 7 FCC Rcd 5676 ("PCS NPRM").

¹⁰PCS NPRM at 5688.

¹¹Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 549 (DC Cir. 1983) ("Small Refiner"). In Small Refiner, the D.C. Circuit held that general notice by an agency that it "might make unspecified changes" in a regulation did not provide adequate notice to interested parties.

¹²PCS NPRM at 5730.

in the PCS docket, that the Commission intended to maintain the remaining global and regional MSS allocations adopted at WARC-92.¹³ That these allocations had been agreed to through an established international process with Final Acts having treaty status only added further weight to COMSAT's conclusion.

As Bell Atlantic indicates, a full examination of the notice given in the PCS proceeding involves a review of the related Emerging Technologies ("ET") docket in which the Commission sought to redevelop spectrum in the 1850-2200 MHz bands for new services and technologies. Contrary to Bell Atlantic's assertions, however, the ET docket did not provide "ample" notice to MSS providers that the global MSS bands were likely to be allocated to terrestrial PCS.¹⁴ In fact, by creating a bifurcated, multiple-docket allocation process, the Commission may have complicated the notice process more than usual.

From the start, the ET docket was intended to identify only a general allocation of spectrum to accommodate emerging technologies without identifying the new services that would use particular bands. The ET NPRM indicated that a separate PCS notice would address the amount of spectrum to be allocated to

¹³Comments of Communications Satellite Corporation, GEN Docket No. 90-314, November 9, 1992. Contrary to Sprint's claims, COMSAT's PCS Comments do not presume a terrestrial PCS allocation in the global MSS bands. Moreover, the fact that one or two other commentors may have addressed this issue, does not mean that COMSAT, or other MSS operators not participating in the PCS proceeding, could not claim that they lacked notice of the Commission's final PCS allocation scheme. See AFL-CIO v. Donovan, 757 F.2d 330 (DC Cir. 1985) ("AFL-CIO").

¹⁴Bell Atlantic Opposition at 9.

PCS and that "further definition" of PCS would make it possible to determine the location of the 2 GHz frequencies to be allocated to PCS.¹⁵ This statement suggests that there could be an intervening notice specifying the exact allocation of the PCS bands before the final rules were adopted. Nothing in the PCS NPRM contradicts this assumption.

In its comments in the ET docket, COMSAT demonstrated an immediate need for a spectrum allocation at 2 GHz to accommodate global MSS services.¹⁶ In its decision, the Commission identified MSS as one of the new services for which spectrum in the ET bands between 1850-2200 MHz could be made available.¹⁷ The allocation of the 2180-2200 MHz band to terrestrial PCS, however, effectively precludes development of MSS in the 2 GHz global bands.

While it is true that a final rule need not be identical to the original proposed rule, a significant deviation deprives the affected parties of notice and an opportunity to comment on the proposal.¹⁸ COMSAT has demonstrated that the deviation between the PCS NPRM and the final PCS allocation is significant, that it forecloses global MSS operations at 2 GHz, and that the FCC took

¹⁵Notice of Proposed Rule Making, ET Docket No. 92-9, 7 FCC Rcd 1542, 1555 (1992).

¹⁶Comments of Communications Satellite Corporation, ET Docket 92-9, June 5, 1992.

¹⁷First Report and Order and Third Notice of Proposed Rule Making, ET Docket 92-9, 7 FCC Rcd 6886, 6893 (1992).

¹⁸See, e.g., AFL-CIO, 757 F.2d at 338; Small Refiner, 705 F.2d at 549.

this action without giving adequate notice to interested parties. Consequently, COMSAT requests that the Commission reconsider its allocation of the 2180-2200 MHz band to terrestrial PCS and proceed immediately to implement the global MSS allocations at 2 GHz adopted at WARC-92.¹⁹

Conclusion

For the reasons stated above and in COMSAT's Petition, COMSAT requests that the Commission deny, in relevant part, the Oppositions of Bell Atlantic, MCI and Sprint, and the Comments of UTC, and reconsider its decision to allocate the 2180-2200 MHz band to terrestrial PCS.

Respectfully Submitted,

COMSAT Corporation

By: Nancy J. Thompson
Nancy J. Thompson

COMSAT Mobile Communications
22300 COMSAT Drive
Clarksburg, MD 20871
(301) 428-2268

Its Attorney

January 13, 1994

¹⁹COMSAT notes that TRW has filed a Petition for Rule Making to allocate the WARC-92 global MSS bands to MSS and urges the Commission to proceed expeditiously with this rule making request. See TRW Petition, Attachment.

CERTIFICATE OF SERVICE

I, Pamela L. Sonnevile, hereby certify that the foregoing "Reply of COMSAT Corporation" was served by first-class mail, postage prepaid, this 13th day of January, 1994, on the following persons:

Thomas P. Stanley*
Chief Engineer
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W., Room 7002
Washington, D.C. 20554

David R. Siddall, Esq.*
Chief, Frequency Allocation Branch
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W., Room 7102
Washington, D.C. 20554

Rodney Small*
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W., Room 7332
Washington, D.C. 20554

Fred Thomas*
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W., Room 7338
Washington, D.C. 20554

Robert Pepper, Chief*
Office of Plans and Policy
Federal Communications Commission
1919 M Street, N.W., Room 822
Washington, D.C. 20554

Norman P. Leventhal
Raul R. Rodriguez
Stephen D. Baruch
David S. Keir
Leventhal, Senter & Lerman
2000 K Street, N.W., Suite 600
Washington, D.C. 20006

Jay C. Keithley
Leon M. Kestenbaum
1850 M Street, N.W., Suite 1100
Washington, D.C. 20036

Kevin C. Gallagher
Centel Cellular Company
8725 Higgins Road
Chicago, IL 60631

W. Richard Morris
P.O. Box 11315
Kansas City, MO 64112

Larry A. Blosser
Donald J. Elardo
1801 Pennsylvania Avenue, N.W.
Washington, D.C. 20006

Gary M. Epstein
Nicholas W. Allard
James H. Barker
William L. Roughton
Latham & Watkins
1001 Pennsylvania Avenue, N.W. Suite 1300
Washington, D.C. 20004-2505

Jeffrey L. Sheldon
Sean A. Stokes
Thomas E. Goode
Utilities Telecommunications Council
1140 Connecticut Avenue, N.W., Suite 1140
Washington, D.C. 20036

Pamela L. Sonnevile
Pamela L. Sonnevile

*Delivery by hand.